

## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A process for manufacturing macroelectronics comprising the steps of:

producing thin film active electronics on separate carrier substrates, ~~wherein at least one of the carrier substrates is flexible; and substrates;~~

positioning the thin film active electronics in facing relation; and

combining said substrates using anisotropic electrical conductors or light guides, ~~guides so that the thin film active electronics are encapsulated by the anisotropic electrical conductors or the light guides.~~

2. (Original) The process of claim 1 wherein one of said substrates is a flexible foil.

3. (Original) The process of claim 1 wherein one of said substrates is a rigid plate.

4. (Original) The process of claim 2 wherein the material for one of said substrates is plastic.

5. (Original) The process of claim 3 wherein the material for one of said substrates is plastic.

6. (Original) The process of claim 2 wherein the material for one of said substrates is glass.

7. (Original) The process of claim 3 wherein the material for one of said substrates is glass.
8. (Original) The process of claim 2 wherein the material for one of said substrates is metal.
9. (Original) The process of claim 3 wherein the material for one of said substrates is metal.
10. (Original) The process of claim 1 wherein the thin film active electronics are produced continuously on separate carrier substrates.
11. (Original) The process of claim 4 wherein organic light emitting diodes are formed on the plastic substrate.
12. (Original) The process of claim 5 wherein organic light emitting diodes are formed on the plastic substrate.
13. (Original) The process of claim 6 wherein organic light emitting diodes are formed on the glass substrate.
14. (Original) The process of claim 7 wherein organic light emitting diodes are formed on the glass substrate.
15. (Original) The process of claim 6 wherein thin film transistors are formed on the glass substrate.

16. (Original) The process of claim 7 wherein thin film transistors are formed on the glass substrate.

17. (Currently Amended) A process of making electronic circuits comprising the steps of:

forming at least two active circuits on separate carrier substrates, wherein at least one of the carrier substrates is flexible, and substrates;

positioning the at least two active circuits in facing relation; and

~~combining connecting said active circuits by connecting them with a material which conducts in a direction perpendicular to the separate carrier substrates. substrates, wherein the at least two active circuits are encapsulated by the material.~~

18. (Currently Amended) A method of manufacturing an electronic display comprising the steps of:

depositing a transparent conductor on a transparent substrate;

forming a thin film organic light emitting diode circuit on said transparent conductor;

forming a thin film transistor circuit; and circuit on a second transparent substrate;

positioning the organic light emitting diode and thin film transistor circuits in facing relation; and

laminating said circuits to each other.

19. (Original) The method of claim 18 wherein said laminating step uses an adhesive anisotropic conductor.

20. (Original) The method of claim 19 wherein the conductor is an electrical or optical conductor.

21. (Original) The method of claim 19 wherein the bonding layer is the conductor.

22. (Currently Amended) A method of manufacturing an electronic circuit comprising the steps of:

forming a first active circuit on a first ~~flexible~~ plane;

forming a second active circuit on a second ~~flexible~~ plane; and

positioning the first and second active circuits in facing relation; and

co-laminating said first and second planes with an anisotropic conductor ~~in between~~.  
conductor, wherein the anisotropic conductor encapsulates the first and second circuits.

23. (Original) The process of claim 4, wherein the thin film active electronics comprise thin film transistors.

24. (Original) The process of claim 8, wherein the metal comprises steel.

25. (Original) The process of claim 24, wherein the thin film active electronics comprise organic light emitting diodes.

26. (Currently Amended) A process for manufacturing macroelectronics comprising the steps of:

producing thin film active electronics on separate carrier substrates;

positioning the active electronics of the carrier substrates in facing relation with respect to each other; and

combining said substrates using anisotropic electrical conductors or light guides. guides,  
the anisotropic electrical conductors or light guides encapsulating the active electronics.

27. (Previously Presented) The process of claim 26, wherein one of said substrates is a flexible foil.

28. (Previously Presented) The process of claim 26, wherein one of said substrates is a rigid plate.

29. (Previously Presented) The process of claim 27, wherein the material for one of said substrates is plastic.

30. (Previously Presented) The process of claim 28, wherein the material for one of said substrates is plastic.

31. (Previously Presented) The process of claim 27, wherein the material for one of said substrates is glass.

32. (Previously Presented) The process of claim 28, wherein the material for one of said substrates is glass.

33. (Previously Presented) The process of claim 27, wherein the material for one of said substrates is metal.

34. (Previously Presented) The process of claim 28, wherein the material for one of said substrates is metal.

35. (Previously Presented) The process of claim 26, wherein the thin film active electronics are produced continuously on separate carrier substrates.

36. (Previously Presented) The process of claim 29, wherein organic light emitting diodes are formed on the plastic substrate.

37. (Previously Presented) The process of claim 30, wherein organic light emitting diodes are formed on the plastic substrate.

38. (Previously Presented) The process of claim 29, wherein organic light emitting diodes are formed on the glass substrate.

39. (Previously Presented) The process of claim 30, wherein organic light emitting diodes are formed on the glass substrate.

40. (Previously Presented) The process of claim 29, wherein thin film transistors are formed on the glass substrate.

41. (Previously Presented) The process of claim 30, wherein thin film transistors are formed on the glass substrate.

42. (New) The process of claim 1, wherein at least one of the substrates is flexible.

43. (New) The process of claim 1, wherein both of the substrates are flexible.

44. (New) The process of claim 17, wherein at least one of the substrates is flexible.

45. (New) The process of claim 17, wherein both of the substrates are flexible.

46. (New) The process of claim 18, wherein at least one of the substrates is flexible.

47. (New) The process of claim 18, wherein both of the substrates are flexible.

48. (New) The process of claim 22, wherein at least one of the planes is flexible.

49. (New) The process of claim 22, wherein both of the substrates are flexible.

50. (New) The process of claim 26, wherein at least one of the substrates is flexible.

51. (New) The process of claim 26, wherein both of the substrates are flexible.

52. (New) A thin-film electronic device comprising:

a first substrate having active electronics formed thereon;

a second substrate having active electronics formed thereon, the active electronics of the first substrate positioned in facing relation with the active electronics of the second substrate; and

an anisotropic electrical conductor or light guide positioned between the first and second substrates and encapsulating the active electronics.

53. (New) The device of claim 52, wherein at least one of the substrates is flexible.

54. (New) The device of claim 52, wherein both of the substrates are flexible.

55. (New) The device of claim 52, wherein at least one of the substrates comprises flexible foil.

56. (New) The device of claim 52, wherein at least one of the substrates comprises a rigid plate.

57. (New) The device of claim 55, wherein one of the substrates is plastic.

58. (New) The device of claim 56, wherein one of the substrates is plastic.

59. (New) The device of claim 55, wherein one of the substrates is glass.

60. (New) The device of claim 56, wherein one of the substrates is glass.

61. (New) The device of claim 55, wherein one of the substrates is metal.

62. (New) The device of claim 56, wherein one of the substrates is metal.

63. (New) The device of claim 52, further comprising organic light-emitting diodes formed on the first substrate.

64. (New) The device of claim 63, further comprising thin-film transistors formed on the second substrate.

65. (New) The device of claim 52, wherein the active electronics are formed continuously on the first and second substrates.

66. (New) The device of claim 65, wherein the first and second substrates are laminated together.